# Fiscal Year 2020 Appendices

# Missouri State Recycling Program

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## Appendix A: FY20 Department Reports of Materials Recycled | Table A.1

| FY20 Number of<br>Pounds Recycled     | Agriculture | Conservation | Corrections | Economic<br>Development | Elementary & Secondary Educ. | Health & Senior<br>Services | Higher Ed & Workforce Development | Commerce & Insurance | House of Representatives | Labor & Industrial<br>Relaions | Mental Health | Natural Resources | Office of State Courts   Supreme Court | Office of<br>Administration | Public Safety | Revenue      | Secretary of State | Social Services | Transportation | State Treasurer | Totals by<br>Material |
|---------------------------------------|-------------|--------------|-------------|-------------------------|------------------------------|-----------------------------|-----------------------------------|----------------------|--------------------------|--------------------------------|---------------|-------------------|--|-----------------------------|---------------|--------------|--------------------|-----------------|----------------|-----------------|-----------------------|
| Aluminum                              |             | 402          |             |                         |                              |                             |                                   |                      |                          |                                |               | 6,752             |  |                             |               |              |                    |                 | 109,920        |                 | 117,074               |
| Ballasts                              |             | 525          | 1,815       |                         |                              |                             |                                   |                      |                          |                                |               |                   |  | 957                         |               |              |                    |                 |                |                 | 3,297                 |
| Batteries (Single-Use & Rechargeable) | 96          | 525          | 2,005       | 27                      |                              | 13                          |                                   |                      |                          | 1,509                          | 90            | 2,123             | 30                                     | 5,347                       | 430           |              |                    |                 | 228            |                 | 12,423                |
| Cardboard ***                         | 5,500       | 5,460        | 827,643     |                         |                              |                             |                                   |                      |                          |                                | 27,010        | 14,368            |  | 4,755                       | 9,550         | 11,089       |                    |                 | 500            |                 | 911,531               |
| Carpet                                |             |              |             |                         |                              |                             |                                   |                      |                          |                                |               | 1,750             |  |                             |               |              |                    |                 |                |                 | 125,896               |
| Commingled Materials ***              | С           | С            | С           | С                       | С                            | С                           | С                                 | С                    | С                        | С                              | С             | 115,936<br>C      | С                                      | С                           | С             | С            | С                  | С               | С              | С               | 459,621               |
| Electronic Scrap ***                  | 82          | 2            | 26,357      | 298                     | 6,640                        | 6,384                       |                                   | 744                  | 753                      |                                | 13,229        | 6,224             | 13,898                                 | 14,703                      | 23,669        | 4,327        | 460                | 19,217          | 7,806          |                 | 395,959               |
| Food-Yard Waste                       |             |              |             |                         |                              |                             |                                   |                      |                          |                                |               | 234,502           |  |                             |               |              |                    |                 |                |                 | 234,502               |
| Glass                                 |             | 225          |             |                         |                              |                             |                                   |                      |                          |                                |               | 10,132            |  |                             |               |              |                    |                 |                |                 | 10,357                |
| Magazines & Catalogs                  |             | 40           |             |                         |                              |                             |                                   |                      |                          |                                | 481           | 919               |  |                             | 40            |              |                    |                 |                |                 | 1,480                 |
| Mixed Office Paper ***                | С           | 28,130<br>C  | 23,566<br>C | 10,692<br>C             | 800<br>C                     | 9,220<br>C                  | 41,696<br>C                       | 5,924<br>C           | С                        | С                              | 3,100<br>C    | 17,258<br>C       | С                                      | С                           | 80,448<br>C   | 516,122<br>C | 429,839<br>C       | С               | 2,500<br>C     | 3,300<br>C      | 2,984,413             |
| Newsprint                             | 1,027       |              | 3,213       |                         |                              |                             |                                   |                      |                          |                                | 993           | 871               |  |                             |               |              |                    |                 |                |                 | 6,104                 |
| Pallets                               |             |              | 90,750      |                         |                              |                             |                                   |                      |                          |                                | 2,000         | 50                |  | 3,275                       | 19,300        |              |                    |                 | 9,454          |                 | 124,829               |
| Pharmaceuticals                       |             |              |             |                         |                              |                             |                                   |                      |                          |                                | 450           |                   |  |                             |               |              |                    |                 |                |                 | 450                   |
| Plastic ***                           | 3,200       | 609          | 1,530       |                         |                              |                             |                                   |                      |                          |                                | 281           | 12,356            |  |                             |               |              |                    |                 |                | 20              | 19,046                |
| Rubber, Tires                         |             | 1,200        |             |                         |                              |                             |                                   |                      |                          |                                |               | 159,946           |  |                             | 60,900        |              |                    |                 | 528,780        |                 | 750,826               |
| Scrap Metal                           | 31,242      | 44,125       | 234,756     |                         |                              |                             |                                   |                      |                          |                                |               | 58,201            |  | 80,306                      | 88,342        | 29,140       |                    |                 | 1,499,097      |                 | 2,065,209             |
| Telephone Books                       |             |              |             |                         |                              |                             |                                   |                      |                          |                                | 250           | 396               |  |                             | 20            |              |                    |                 |                |                 | 666                   |
| Textiles                              |             |              |             |                         |                              |                             |                                   |                      |                          |                                |               | 680               |  |                             |               |              |                    |                 |                |                 | 680                   |
| Tin / Steel Cans                      | С           | 15           | 490,792     | С                       | С                            | С                           | С                                 | С                    | С                        | С                              | 91            | 12                | С                                      | С                           | С             | С            | С                  | С               | С              | С               | 490,910               |
| Totals Reported by Agency             | 41,147      | 81,258       | 1,702,427   | 11,017                  | 7,440                        | 15,617                      | 41,696                            | 6,668                | 753                      | 1,509                          | 47,975        | 642,476           | 13,928                                 | 109,343                     | 282,699       | 560,678      | 430,299            | 19,217          | 2,158,285      | 3,320           |                       |

Total Pounds Recycled in FY20: 8,715,273
4,358 Tons

### **Appendix A: FY20 Department Reports of Materials Recycled**

#### Table A.1 | Note on Boxes with C's:

A "C" in a box on this table indicates an agency recycled the designated item by utilizing the Jefferson City (JC) or St. Louis recycling contracts (StL). Materials collected via the JC contract include **Mixed Office Paper and Commingled Materials (Cardboard, Aluminum, Plastic,** and **Steel (tin) Cans)**. A box that has a number over a "C" indicates the agency reported material that was recycled statewide, but not reported in the JC or StL contract figures. For example, Natural Resources reported 115,936 pounds of commingled recycled <u>and</u> Natural Resource offices in JC utilized the JC Recycling Services contract to recycle commingled material.

#### Table A.1 | \*\*\*Note on "Totals by Material"

This column includes collection totals as reported by the recycling contractor for the following materials: **Cardboard, Carpet, Commingled, Electronic Scrap, Mixed Paper, and Plastic Wrap**. Figures reported by the contractor do not appear in **Table A.1**; however, these figures are reflected in the "Totals by Material" column. Contractor figures are summarized in table A.2 (below).

Agencies that utilized a recycling contract, but do not appear in Table A.1 include: **Environmental Improvement Energy Resources Authority, Lottery, Tax Commission, MCHCP, MOSERS, Governor Office, Attorney General, Auditor, and Senate**. Amounts of materials recycled by these agencies are included in the "Totals by Material" column.

#### **Contract Reporting & Table A.1**

Total pounds recycled by agencies utilizing the Jefferson City, St. Louis, Kansas City, onsite document destruction, electronic scrap, and carpet contracts are provided in the table A.2 below. These figures are reported as cumulative totals. Due to contract reporting, data is reported by building and it is not feasible to separate data by agency where there are multiple agencies in the same building. All numbers in table A.2 are reflected in the "Totals by Material" column in table A.1.

Table A.2

| EV20 Total Down do     |                  |            |             | Onsite      |
|------------------------|------------------|------------|-------------|-------------|
| FY20 Total Pounds      |                  |            |             | Document    |
| Recycled via Contracts | Jefferson City   | St. Louis  | Kansas City | Destruction |
| Mixed Office Paper     | 935,129          |            | 5,814       | 874,175     |
| Cardboard              |                  |            | 5,656       |             |
| Commingled             | 296,860          | 46,825     |             |             |
| Plastic Wrap           | 1,050            |            |             |             |
|                        | Statewide Collec | ction Amou | nts         |             |
| Electronic Scrap 251   | ,166             |            |             |             |
| Carpet 124             | ,146             |            |             |             |

### **Appendix A: FY20 Department Reports of Materials Recycled**

|                          |             | mber of<br>Recycle                     |                       | Number of Gallons Recycled |              |                |                       |              |            |       |
|--------------------------|-------------|--|-----------------------|----------------------------|--------------|----------------|-----------------------|--------------|------------|-------|
| Department<br>Reporting  | Cell Phones | Fluorescent +<br>Incandescent<br>Lamps | Printer<br>Cartridges | Anti-freeze                | Fuel, Diesel | Fuel, Gasoline | Fuel / Oil<br>Filters | Oil, Cooking | Oil, Motor | Paint |
| Agriculture              |             |  |                       |                            | 228          | 1,384          |                       |              | 85         |       |
| Conservation             |             | 6,961                                  | 45                    |                            |              |                |                       |              | 201        |       |
| Corrections              |             | 3,918                                  |                       |                            |              |                |                       |              |            |       |
| Mental Health            |             |  | 113                   |                            |              |                |                       | 570          |            |       |
| Natural Resources        |             | 3,076                                  | 67                    | 60                         | 249          |                | 82                    | 125          | 646        | 52    |
| Office of Administration |             | 9,644                                  | 38                    |                            |              |                |                       |              |            |       |
| Public Safety            |             |  | 639                   |                            |              |                |                       | 1,446        |            |       |
| Transportation           |             | 10                                     |                       | 50                         |              |                |                       |              | 8,516      |       |
| Treasurer's Office       |             |  | 77                    |                            |              |                |                       |              |            |       |
| TOTALS                   | 430         | 23,609                                 | 2,941                 | 110                        | 477          | 1,384          | 82                    | 2,141        | 9,448      | 52    |

#### **Note on Cell Phones:**

The total of 430 is a combined agency total. Even though no individual agency numbers are reported, for simplicity it is included in this table.

#### **Note on Total Printer Cartridges:**

962 printer cartridges were recycled by employees using a statewide service for this item and are included in the 'TOTALS' amount shown in this table. Note on Agency-Specific Printer Cartridges: Figures appearing for individual agencies may not be an accurate reflection of the number of printer cartridges recycled. In some buildings agencies utilize a centralized recycling drop-off for cartridges and it is not feasible to separate agency data once recycled.

### **Appendix B: FY20 Department Reports for Recycled Content Product Procurement**

| FY20 Non-Paper<br>Recycled Content<br>Procurement | Agriculture | Corrections | Elementary & Secondary Education | Higher Education & Workforce Development | Mental Health | Natural Resources | Office of Administration | Public Safety | Revenue     | Treasurer's Office | Category<br>Totals |
|---|-------------|-------------|----------------------------------|--|---------------|-------------------|--------------------------|---------------|-------------|--------------------|--------------------|
| Batteries,<br>Rechargeable                        |             |             |                                  |  | \$445         |                   |                          |               |             |                    | \$445              |
| Carpet / Construction Materials                   |             | \$9,580     | \$93,469                         |  | ΨΗΙ           |                   | \$16,566                 | \$37,542      |             |                    | \$490,706          |
| Cardboard Boxes                                   |             | \$31,527    |                                  |  |               |                   |                          | \$1,976       |             |                    | \$132,294          |
| Janitorial Supplies                               |             | \$321,026   |                                  |  | \$5,283       |                   | \$1,212                  |               |             |                    | \$536,127          |
| Metal Products                                    |             | \$18,959    |                                  |  |               |                   |                          |               | \$7,204,250 |                    | \$7,448,334        |
| Office Supplies                                   | \$141       |             |                                  | \$16,701                                 | \$12,674      | \$11,855          |                          |               |             | \$1,375            | \$796,845          |
| Park   Playground<br>Supplies                     |             |             |                                  |  |               |                   |                          |               |             |                    | \$25,124           |
| Printer Cartridges,<br>Remanufactured             | \$293       | \$174,014   |                                  |  | \$16,870      |                   |                          |               |             |                    | \$191,177          |
| Promotional Products                              |             |             |                                  |  |               |                   | \$140                    |               |             |                    | \$140              |
| Remanufactured<br>Furniture                       |             |             |                                  |  |               |                   |                          |               |             |                    | \$274,720          |
| Vehicle Maintenance<br>Supplies                   |             |             |                                  |  | \$260         |                   |                          |               |             |                    | \$260              |
| Agency Totals                                     | \$434       | \$555,106   | \$93,469                         | \$16,701                                 | \$35,532      | \$11,855          | \$17,918                 | \$39,518      | \$7,204,250 | \$1,375            |                    |

Total Dollars Spent on Non-Paper Recycled-Content Products in FY20 = \$9,896,172

#### **Procurement**

When adding figures in each row the following needs to be considered. Carpet contractors reported agency purchases of **\$424,041**. Construction Materials contractors reported purchases of \$57,085. Office Supplies contractors reported purchases of **\$771,685**. MVE provided procurement figures for Cardboard Boxes (\$132,294); Janitorial Supplies-plastic bags (\$530,844); Metal Products (\$244,084); Park & Playground Supplies-Recycled plastic picnic tables and benches (\$25,124); and Remanufactured Furniture & Recycled Fabric (\$274,720). When adding the figures in each row - these amounts need to be included in the sum.

# Note Regarding Park & Playground Supplies and Remanufactured Furniture:

No individual agency data was reported for these products. For simplicity the totals are included in this table.

### **Appendix B: FY20 Purchases of Recycled Paper Compared to Virgin Paper**

| Product<br>Category  | Recycled<br>Paper<br>Purchases | Virgin Paper<br>Purchases | Recycled Paper Purchases as a % of Total Purchases in Product Category |      |      |  |  |  |
|--|--------------------------------|---------------------------|--|------|------|--|--|--|
|  | FY20                           | FY20                      | FY20   | FY19 | FY18 |  |  |  |
| Fine Paper<br>Products (office,<br>copy, fax)  | \$9,753                        | \$685,122                 | 1%   | 13%  | 34%  |  |  |  |
| Course Paper<br>Products<br>(napkins, towels,<br>tissues)  | \$1,062,116                    | \$14,430                  | 99%  | 97%  | 100% |  |  |  |
| Forms<br>(continuous &<br>snap out)  | \$0                            | \$40                      | 0%   | 12%  | 100% |  |  |  |
| Envelopes (Plain<br>or Printed)  | \$198,432                      | \$87,150                  | 69%  | 84%  | 93%  |  |  |  |
| Printing by contractors (40% of total charge is attributable to paper - figures appearing in this row represent paper cost only) | \$160,887                      | \$271,321                 | 37%  | 28%  | 26%  |  |  |  |
| Overall Totals   | \$1,431,188                    | \$1,058,063               | 57%  | 80%  | 68%  |  |  |  |

In FY20, 57 percent of agency paper purchases included recycled content. The state of Missouri spent \$1,062,116 on recycled toilet paper (Course Paper Products) in FY20 for approximately 33,988 cases of toilet paper made with 100% recycled content. Purchasing this type of recycled paper compared to purchasing the same amount of virgin paper translates into the following estimated benefits\*:

- \* 2,540 fewer tons of wood used or about 15,200 fewer trees
- 7,100 million BTUs less energy enough to power 68 homes in Missouri for a year
- \* 10,000,000 less gallons of water used about the same amount used by 7,200 clothes washers operated for a year
- \* 8,480,000 pounds less  $CO_2$  equivalent generated 773 fewer cars on the road each year
- \* 11,000 fewer pounds of solid waste equivalent to 2,600 Americans generating no waste for one day
- \* Environmental impact estimates were made using the Environmental Paper Network Paper Calculator Version 4.0

## **Appendix B: FY20 Department Reports of Recycled and Virgin Paper Purchases**

| FY20 Department<br>Detail of Recycled &<br>Virgin Paper<br>Purchases | Fine Paper Products<br>(printer / copier<br>paper) | Course Paper<br>Products (toilet<br>paper / paper<br>towels) | Forms -<br>Continuous &<br>Snap Out (high<br>speed printers) | Envelopes          | Printing by<br>Contractors |
|--|--|--|--|--------------------|----------------------------|
| Judiciary (100)  | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| SOS (231)  | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| Auditor (251)  | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| STO (272)  | \$16,318   | \$316  | -  | -                  | -                          |
| ()   | \$607  | \$87   | -  | \$14,520           | -                          |
| AGO (282)  | -  | -  | -  | -                  | -                          |
| 0.4 (200)  | - 071.151  | -  | -  | -                  | -                          |
| OA (300)   | \$71,151   | -  | -  | -                  | -<br>\$245                 |
| MDA (350)  | \$2,733  | \$14,114   | -  | \$941              | \$245<br>\$63,302          |
| MDA (550)  | \$2,733<br>\$56                                    | \$14,114<br>-  | -  | \$9 <del>4</del> 1 | \$05,502                   |
| DIFP (375)   | \$30   |  | -  | -                  | -                          |
| DIII (373)   | -  |  |  |                    |                            |
| MDC (400)  | -  | -  | -  | -                  | -                          |
| 1112 (100)   | _  | _  |  | _                  | _                          |
| DED (419)  | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| DESE (500)   | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| DHEWD (555)  | -  | -  | -  | -                  | \$35,221                   |
|  | -  | -  | -  | -                  | -                          |
| DHSS (580)   | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| MoDOT (605)  | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| DOLIR (625)  | -  | -  | -  | -                  | -                          |
| D) (II ((50)   | - 072  | -  | -  | -                  | -                          |
| DMH (650)  | \$6,873  | -  | -  | -                  | \$623                      |
| DNR (780)  | \$90   | -  | -  | -                  | -                          |
| DIVIC (700)  | \$9,090  | \$251  |  | _                  | \$3,264                    |
| DPS (812)  | -  | Ψ231   | -  |                    | ψ3 <u>,</u> 204            |
| D1 5 (012)   | _  | _  |  | _                  | \$68,730                   |
| DOR (860)  | -  | -  | -  | -                  | -                          |
| . (555)  | -  | -  | -  | -                  | -                          |
| DSS (886)  | -  | -  | -  | -                  | -                          |
|  | -  | -  | -  | -                  | -                          |
| DOC (931)  | \$13,190   | -  | \$40   | -                  | \$10,184                   |
|  | -  | \$912,501  | -  | -                  | -                          |
| Totals   | \$685,122  | \$14,430   | \$40   | \$87,150           | \$271,320.52               |
| Totals   | \$9,753  | \$1,062,116  | \$0  | \$198,432          | \$160,887.03               |
|  |  |  |  |                    |                            |

GRAY HIGHLIGHT = VIRGIN

GREEN HIGHLIGHT = RECYCLED